

Amendments to the Specification:

Please replace paragraph [0022] with the following amended paragraph:

[0022] The establishment of a secure connection between a server and a browser can be improved by batching the initial handshakes on the web server. In one embodiment the web server waits until it receives b handshake requests from b different clients. It treats these b handshakes as a batch, or set of handshakes, and performs the necessary computations for all b handshakes at once. Results show that, for $b=4$, batching the Secure Socket Layer ("SSL") handshakes in this way results in a factor of 2.5 speedup over doing the b handshakes sequentially, without requiring any additional hardware. While the Secure Socket Layer protocol is a widely utilized technique for establishing a secure network connection, it should be understood that the techniques described herein can be applied to the establishment of any secure network-based connection using any ~~of a number of~~ of protocols.

Please insert the following paragraph after paragraph [0126]:

[0126.1] It should be noted that secure communications could include secure socket layer ("SSL") messages, transport layer security ("TLS") messages, or internet protocol secure ("IPSec") techniques.